

CAT

**The Newsletter of the Cumbria Amenity Trust
Mining History Society**



Thornthwaite mine, Keswick. From Cumbria Archives, Barrow-in-Furness

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Cumbria Amenity Trust Mining History Society

Newsletter No 120, August 2015

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Peter Blezard, 1949 - 2015

It is sad to have to report the death of Pete Blezard on 9th May, after an illness. He was always fit and strong and seemed indestructible, so to lose him at such an early age is poignant. I first met him at the bottom of Brewery shaft in 1981 on my first major CAT trip, at a moment when I was a bit overwhelmed by the situation and apprehensive about the 300 foot climb out on electron ladders. He was both reassuring and supportive then and has always instilled confidence.



Pete was one of the group of friends who explored Greenside mine in the 1970's and subsequently, in 1979, became founder members of CAT. He has supported our Society ever since with his expertise and leadership and has been the organiser and driving force behind projects such as Greenside mine, Hudgillburn, Coniston Hospital Level and Kernal Crag, and Tilberthwaite, as well as the restoration of the Middlecleugh Portal at Nenthead

A Celebration of his life was held at Carlisle Crematorium. Although he is no longer with us his influence continues and his memory remains. IM

Thank you. I would like to express my sincere thanks to all those friends who attended Pete's funeral. Thanks also for all the cards. Your support was overwhelming; it made me realise how much Pete will be missed. I know Pete gained much pleasure over the years from being a CATMHS member. Pete enjoyed sharing his knowledge of mines and mining; he also enjoyed the comradeship that comes from working underground, often in difficult conditions, but that was Pete, always up for a challenge. Anne Danson.

Memories of Pete Blezard, 9th May 1949 – 22nd May 2015. From Phil Meredith

I first met Pete Blezard in the autumn of 1968, when we started our mining engineering studies at the Royal School of Mines in London. We both became involved in student politics and I recall many evenings trying, and mostly failing, to sell copies of the Workers Press in pubs and outside railway stations. Apart from this diversion from our studies, Pete also introduced me to the pleasures of caving and rock climbing. We were lucky enough to spend five weeks of our second year on a mine surveying course at Tywarnhale Mine in Cornwall; with weekends off spent exploring the wonderful granite sea-cliffs at Bosigran. My first experience of abseiling was down a Cornish cliff with the rope tied around the bumper of Pete's Hillman Minx. During Pete's own descent the wind blew a karabiner into his eye and flicked out one of his contact lenses; he had terrible eyesight. This made for an eventful journey home punctuated by stops in laybys for Pete to swap his one remaining lens from left eye to right and back again as each in turn became tired; it was a nervous and much relieved crew who arrived back in London the following morning. During the two long summer vacations Pete worked at a copper mine in the Troodos Mountains of Cyprus and then at

Kilembe mine in the Ugandan highlands; experiences that were to prove invaluable in working on CAT projects in later years.

After graduation, achieved in spite of our extra-curricular activities, most of the jobs available in metalliferous mining were in apartheid-era South Africa. This was not a consideration, so we scratched a living as best we could around collecting and selling rocks and minerals while living in spartan cottages in High Gawthwaite and Kirby-in-Furness. During this period, Pete supplemented his income with some supply teaching; technical drawing and religious instruction! After his interview, the headteacher told Pete, "*It's between you and the vicar, but the vicar can't draw*" – so Pete got the job.

Things began to look up, and we bought a small house on the Square in Broughton-in-Furness and started Broughton Minerals, our lapidary and mineral specimen business. This quickly outgrew the space, so we moved to Ashfell Farm in Ravenstonedale; where Pete was to spend the rest of his life. Anne and Deidre joined us there, and we conceived our first big adventure, driving an old Transit van, bought for £400 from the local abattoir, overland to Nepal to go trekking in the Himalaya. It was an epic journey through many countries now impossible to traverse, but the trek to the Annapurna Sanctuary made it worth the effort. The mid-winter return involved a major breakdown and loss of passports on the Khyber Pass, the fuel freezing while driving through northern Iran in the night, and the engine eventually blowing up in Austria; so we abandoned the van and got the train back to England, arriving on Christmas Eve. We returned to Nepal three years later with Peter Fleming in tow, but this time by air. Pete got us a *good deal* via a friend; the world was our oyster with Ariana Afghan Airways via Kabul. Unfortunately, between the booking and the flight the Soviet Union decided to invade Afghanistan; whether these two things were connected I have no idea! Tanks on the runway and an armed guard escort made the prospect of climbing Himalayan peaks seem like child's play. In spite of all, we managed the first British circumnavigation of the Annapurna Massif via the Thorong La at 17,700 feet. While camped on the pass, I developed pulmonary oedema, which proved to be a major inconvenience. This is where Pete's stamina and perseverance came to the fore. While I staggered down the pass leaning on Deidre, Pete carried both my rucksack and his own down via Muktinath to Jomosom in the Kali Gandaki, selflessly abandoning his only opportunity to climb the 20,000 foot peak that was our target.

Life back in Cumbria was a simple affair, punctuated by trips away in the winter to seek sunshine and mineral specimens; driving down to Morocco and over the Atlas Mountains searching for erithrite crystals in the desert; running from an angry bull in northern Spain with a rucksack full of pyrite crystals; carefully washing our hands after handling



Diedre, Phil, Pete and Anne at Force Crag mine

cinnabar in Almaden. Summer weekends were spent climbing, and in winter we opened up old mines after being schooled in the black arts of digging by Ronnie Calvin. Notable early successes were Fleming's Level at Coniston and Red Ghyll Mine on the Caldbeck Fells. But the best of all, the most taxing; the Glencoyne Level of Greenside Mine, opening up 800 feet of descent down rusting, rickety and rotten ladders to the Lucy Tongue Level. These were days of little regulation, and we were able to feed the mineral collecting rat; campyllite and linarite from the Calbeck Fells, witherite from Haggs Mine, sphalerite from Smallcleugh and fluorite from Hilton. This under regulated world was Pete's natural habitat; if a regulation makes no sense, ignore it; if a rule is stupid and illogical, break it. So every time I leave the trodden path to take the direct route; every time I leave the groomed piste to ski the fall line; in fact, every time I take the road less travelled, Pete will be there in my head, and in my heart, urging me on.

In the late 70s our paths diverged. I moved to London to pursue an academic career while Pete and Anne made Broughton Minerals into a successful and sustaining business. We continued to have many trips together, often with Peter and Margaret Fleming, exploring the highlands and islands of Scotland and the coastlines of Pembroke and Donegal; with occasional forays further afield to the frozen ice-fields of Iceland and the warm waters of the Caribbean. But what I realise on looking back is that we never ever had just a simple holiday with Pete, instead we had *escapades*; much more fraught, but infinitely more memorable.

But Pete had a gentler side too: He was one of the kindest and most generous people I have known; not just in a material way but, perhaps more importantly, in his generosity of spirit. He gave people the benefit of the doubt and always supported the underdog. It's a massively overused cliché, but perfectly correct here; Pete was one of a kind. Along with many other people, I will miss him hugely; in fact I already do. I cling to all the memories of those adventures; those *escapades*. So, farewell Pete and thanks for all the good times.

Philip Meredith

From John Brown

I was very fortunate to have been involved in many projects with Pete, too many to list here. His contribution to opening, exploring and conserving mines in the north of England is huge.

There was always that certain spark and humour that exuded from Pete when you were in his company and most of my time with him was spent in dark and at times hazardous places, so it was always a great joy to have him there. Without a doubt, he was fun to be with and we were always having a laugh and a joke. However, there was a more serious side to Pete and we all learned so much from him and without his leadership, knowledge and camaradery much of what has been achieved by CAT on its many projects would never have happened. He taught us all the methods and techniques which we use today which he helped us to refine over the years, but just as important, how to watch out for each other in some of the more challenging moments.

His humour still remains! The day after I received the sad news about Pete I was leading a trip into Hudgill Burn Mine for the NAMHO weekend at Nenthead. I had a group of six cavers, with Colin Woollard assisting to make sure we did not lose anyone in the 13 plus kilometres of cave passages. On the way to the caverns we diverted to see a couple of the digs which we had done some 15 years earlier. Upon arriving at the junction with the Hudgill Vein and site of dig No. 3 was one of our old wheelbarrows leaning against the wall and on it was Pete's pet rat, just one of many out of his arsenal of plastic toys which provided all sorts of surprises hidden around and usually placed just where you were about to put your hand. I just had to stop and tell these cavers about Pete.

As many of you know, there are so many reminders of Pete underground in 'The Lakes' and the Northern Pennines and he will be greatly missed.

John Brown

From Warren Allison

Having known Pete for close to 30 years there are so many fond memories, especially on the various underground digs the Society has done over 23 years, the scale of which appears not to have been repeated by an amateur group anywhere in the country and would have not happened without him through his knowledge and expertise. However there are two projects which come to mind.

When the New Coledale Mining Company was working Force Crag Mine where members of the society helped, Pete allowed Ian Tyler and myself to explore the old workings some of which uncovered new ground, such as digging out the entrance to No 5 level above the High Force workings, forcing a route from No 3 level through No 2 and to No 1 level which allowed the through trip from the upper workings and exiting at No 0 level, a vertical height of 996 feet to be accomplished (never to be repeated), as well as the discovery of the large stope near the end of No 1 level. On occasions as a way to thank the company we assisted with the refurbishment of the mill and were very fortunate to see it in operation, we re-felted the office roof and repaired the road. These were exciting times with the company valiantly trying to re-open what was to be the Lake District's last working mine.

However the dig that personally meant the most to me was the re-opening of the Lucy Tongue Level at Greenside Mine where my mother's family (including my mum) had worked for over 80 years until it closed. At Pete's insistence I was the first person since the mine closed to walk from the entrance to Smiths shaft a mile underground, one of the proudest moments in my life, to which I have Pete to thank for.



Pete with Warren, Entrance to the Lucy Level, re-opened 1992

This was the first major underground dig the society had attempted and Pete's words at the time were 'do it my way or I won't be here'. This was proper mining which was to take five years of hard graft and also started the digging team's close friendship.

Some memories of it include:

- Pete and I lying in the water which was coming over the first two falls plugging the holes in the roof.
- Pete holding the scaffolding tube while I was knocking it in with a 16lbs sledgehammer which unfortunately I let go of. It flew through the air, glancing the side of Pete's face. We were sure he had been seriously hurt and asked if he was all right, to which he replied 'I am just going away for a few minutes, but I will be back'. Sure enough he did with a chipped tooth and just carried on as normal.
- Pete and Ann had been away on a skiing holiday so we took advantage of putting the uprights at four feet between them instead of three. When Pete came back he expressed his displeasure as we had gone against his advice. It was the first and last time we did.
- Even now over 20 years later it is hard to comprehend what was achieved and people are still awestruck at the work done to dig through the six roof falls, a testament to Pete.
- Pete taught us to do the job properly and the digs will still be standing in over 50 years' time, so well were they done.

It was a great privilege to be asked to speak at his funeral and to sum Pete up, he was always very kind, generous, both Ann and Pete always made you very welcome when visiting Ash Fell Farm, he had plenty of crack and was a genuinely lovely man who will be sorely missed.

Warren Allison



Warren Allison, William Snaith, Pete Sedgwick, John Brown, Pete Blezard, Colin Woollard, Andrew Woollard

Editorial

Delivery of NL 119

I must apologise to those members who had a problem receiving their April Newsletter. I understand that the envelope had insufficient postage attached so the Post Office delivered a note to the effect that everyone had to go to their local Post Office to collect it, and pay a surcharge of £1.45.

Normally I take a sample to my local Ambleside Post Office, where they weigh it and calculate the cost of postage. I then purchase the appropriate number of stamps, take them home, stick them on the envelopes and then deliver the whole lot to the Windermere sorting office. I do it this way because a hundred newsletters are both bulky and heavy and it is difficult to park near the Ambleside Post Office.

When I came to deal with the April NL I found that The Ambleside Post Office was closed for a week for refurbishment, so I drove to Windermere to buy the stamps. I took a sample envelope ready for posting, put it on their scales and asked the counter assistant for stamps for 100 similar packages. She removed it from the scales, asked what it contained, said it was a large letter, and sold me the stamps, which I used in good faith. I now realise that this was not correct, and that she probably disregarded the weight of the article. The error was made by the Post Office counter assistant, not me, so it is a little unfair that they have penalised us for it and caused so much expense and inconvenience.

I complained to the post Office. Here is their response:

18 May 2015. Dear Mr Matheson

Thank you for your email with reference to your poor experience at the Windermere Post Office[®] branch. I am sorry that items of mail that you have recently posted have arrived with a surcharge due to insufficient postage being attached. I do understand the undoubted inconvenience caused and please accept my apologies for this.

It may help if I explain that Post Office Ltd can only be held responsible for individual items weighed and posted over the Post Office counter; issued with a Certificate of Posting. Therefore, as the Post Office branch was not responsible for checking all of the items that were posted, I am unable to offer you a settlement to your claim. I am sorry that I can be of no further assistance with this matter.

I have since reprinted and posted, First class, two newsletters to members who didn't receive it at all. For the first I was charged £2.36, for the second £1.19. I think the Post Office counter staff need some training!

Letters to the Editor

Editors rant – a response

I read the Editors Rant in Newsletter 119 with interest. I hold the opposite view.

The full unadulterated name of the Cumbria Amenity Trust Mining History Society is at best an encumbrance, at worst an embarrassment. I attended the recent NAMHO conference, which involves considerable networking within our community. Naturally when getting to know fellow trip members, one must ask what club are they with. They all have a handy abbreviation or other shortened moniker. KURG, Wealden, Welsh Mines etc. For my part I don't know what to say. Do I attempt to pronounce CATMHS? I have yet to hear something that doesn't sound like a speech impediment. Do I shorten it to CAT? If I do that, the obvious question is what does CAT stand for? Easy, the Cumbria Amenity Trust Mining History Society. It takes so long to say, you feel like a bore. Shorten it to Cumbria Amenity Trust? What does that mean?

I can of course go on to explain why we have such a long name with two irrelevant words in it, but do they care? The words Amenity Trust may have had relevance during the founding of our society, but I believe they have not done so for at least 25 years.

We should jettison our legacy baggage, lest we become a historical artefact ourselves. If we were called the Cumbria Mine History Society, shortened to Cumbria, I believe not only would conversations such as the above be easier, but our purpose would be easily discernible by anybody reading or hearing our name.

I know when I first saw our full name written down, I had no idea what the society stood for or did. I don't believe I am the only one. As a society we always need new members. Having a name which neatly encapsulates our purpose is a must, and is something I do not believe we currently have.

Chris Cowdery

Letter to the editor, Tilberthwaite copper mine

Dear Sir,

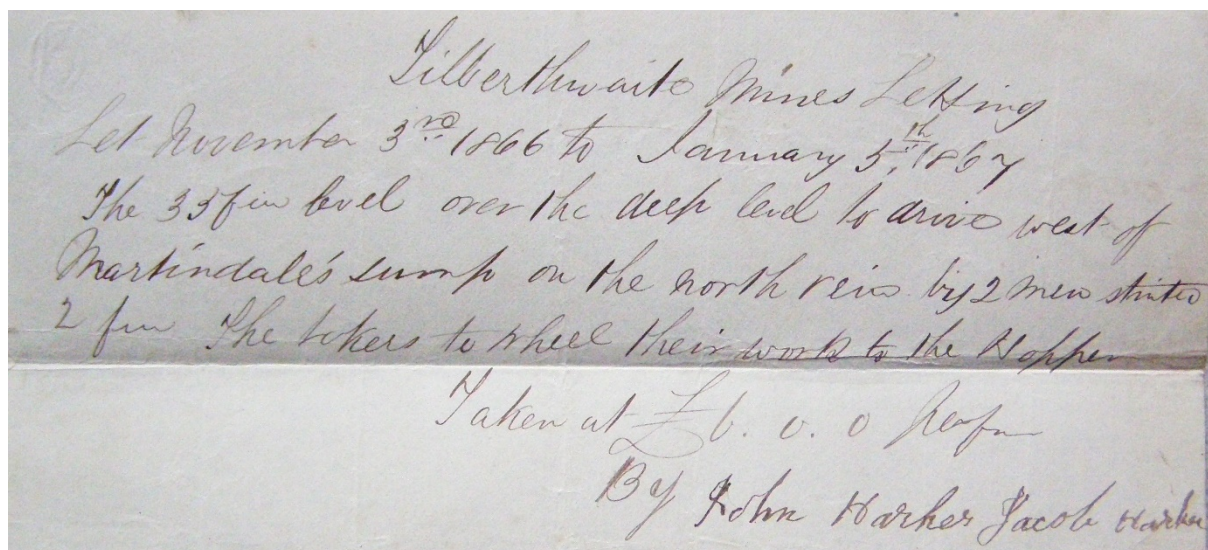
I read with great interest the article in NL 119 "Development and demise of the Tilberthwaite Copper Mine and Penny Rigg processing plant" and am in agreement with the reasoning given for the problems at Tilberthwaite but believe insufficient emphasis was placed on the role of the developing Hodbarrow mine in occupying a very large part of John Barratt's time and financial resources in the period from 1850 until his death.

In 1850 the Coppermines valley mines were a successful and profitable enterprise, the development of which had consisted of locating mineral veins at the surface; initially extracting ore from trenches until flooding problems became impossible to deal with using available technology and then driving successively lower adits to provide drainage and allow gravity transfer of the ore downwards. Given this success it is not difficult to imagine that Barratt, knowing the location of the copper deposits at surface in Tilberthwaite and now a very wealthy man, saw no problems in repeating the process at Horse Crag, except that a much longer horse level would have to be driven. His labour force and supervisory staff would all have been familiar with the necessary operations.

The Hodbarrow operations were completely different and involved mining operations with which Barratt had no previous experience; prospecting for and mining iron ore were an area requiring different skills to those in the lead and copper mining industry. Holland gives the concentrate output at Coniston in 1854 as 3,048 tons; the like figure for Hodbarrow in 1867 was 133,216 tons. Barratt was very fortunate to have formed a partnership with the very able and industrious Nathaniel Caine, but even so, as the majority shareholder in an unlimited liability company, he must have been very deeply involved and, even for a man of his wealth, must have had many sleepless nights. Caine himself said "We spent upwards of £3,000 in our first operations without getting any ore and did not divide any profits till over £57,000 had been expended during a period of about 10 years". Apart from the financial burden the partners had to negotiate the change of their lease from one allowing exploration to a production agreement; a fraught process since disagreement between the mineral landlord and the lessees was a very real prospect. A port had to be constructed at Borwick Rails and sidings laid to connect to the Furness Railway as well as housing being constructed for a rapidly growing workforce. In 1864 William Barratt, John Barratt's nephew, reported August output as 6,000 tons, with 166 working underground and in September "The prospects throughout the Mine are of a highly gratifying character..... so far as operations have been extended we have discovered one Million Tons of Ore". By 1866 employment underground had increased to nearly 300 men.

Given this enormous amount of activity in fields new to Barratt, it is hardly surprising that he was prepared to allow Tilberthwaite to continue along its programmed course; even the mill was hardly new technology, since it had been in use at Coniston for at least twenty years.

Yours faithfully,
William Bickford.



Tilberthwaite Mines Leasing
 Let December 3rd 1866 to January 3rd 1867
 The 3rd level over the deep level to drive west of
 Martindale's dump on the north vein by 2 men started
 2 fms. The takers to wheel their work to the Hopper
 Taken at Lb. v. o. Hop
 By John Barker Jacob Barker

Take note, showing work carried out in Tilberthwaite mine in 1867. That they had to wheel their work to the Hopper suggests that the shaft connected with the Horse Level at that time. IM

CATMHS Archive Development

As part of last year's review of the medium term development of CATMHS it was recognised that we needed to consider how to handle our book and archive materials in the longer term. It may be necessary to change our current arrangement with the John Ruskin Museum as we move forward over a period of about 2 years. We are also obliged to make ourselves more publically accessible since we are a charity and the charity rules have changed in this respect. It was recognised that our material, as it is housed in the Ruskin is not very accessible to either CATMHS members or members of the public.

The committee discussed our options during the review and decided we should move to a wholly electronic medium for our archive material. We also agreed that we would not continue to hold a library of books ourselves but would seek an arrangement where a third party would hold our books and control public access to them. It was agreed that our archive should be focussed on the Cumbrian mining area with a little discretion on overlapping relevant items.

Discussions are ongoing with our webmaster to upgrade the website to accommodate the archive material as it is converted. To do this some development work may be necessary and we will need to learn as we go forward. We propose to place open documents on our website in the public domain with sensitive or copy restricted documents placed in the member's area. Documents will be watermarked on access with arrangements through the web to obtain a full quality copy.

Newsletters will be available to members within the members' area and newsletters older than 3 years will be available in the public area. An annually updated index will also be available to the public and arrangements for recent copies to be purchased will be in place.

We have taken the view that most material is "copy left" and would therefore ask any user to acknowledge CATMHS as source. Where necessary copyright items will be removed from display upon request.

We have an agreement with the British Geological Society for all our mine plans to be scanned. They will shortly make them available to the public through their system. Our mine plans have now been scanned and returned to us in accordance with this agreement.

Our current archive and library holdings amount to around 1500 items and take up significant space. We propose that items that can be categorised as "out of county" or "of national interest" are offered to relevant societies who may wish to supplement their archives or represent a better repository for the material. Upon digitisation the prime physical document will be catalogued and offered to the Cumbria County Record Office in the first instance. This is part of a disposal process that seeks to find a best home for the document by looking at the record office, other relevant societies, members requests etc. or ultimately destruction. The few original documents we hold will be carefully managed on an individual basis. It should be noted that most of our archive material is photocopied material from libraries etc. and is often incomplete or of poor quality. Many key documents are now available on the internet and can be downloaded. Logistically, poor quality copied material will need to be destroyed at the earliest opportunity to reduce the volume of our holdings.

The committee are of the view that material donated to the CATMHS archive over time has been freely given and the society are free to use it as they think fit. If particular donors feel

this is inappropriate and would like their material returned to them please make a request to the CATMHS secretary so that your wishes can be recognised and accommodated.

Colin Woollard

NAMHO Conference

CAT had considerable input to the recent NAMHO Conference, which was hosted by Nenthead Mines Conservation Society, some of which is reported elsewhere in this Newsletter. We have received a letter from Nenthead Mines Conservation Society thanking us for our help and support.

Mines Forum, 2nd June, Honister Quarry

Representatives were present from LDNPA, Environment Agency, CATMHS, COMRU, Coniston History Society and Honister Quarry

It had been decided to change the format of the agenda to be based on sites rather than organisations

Force Crag mine

There was no representative present from the National Trust. Treatment of effluent from the mine had been better than expected. An exit valve from one of the ponds had become blocked causing the water level in the pond to rise but it had been caught in time to prevent problems. The cause was a build up of blue/green algae. Students from Newcastle University will be investigating the changes in night time and day time output of ground water to Caudale Beck, CATMHS expects to start work on the restoration of No 3 Level portal later this year.

Greenside Mine

Jamie Quartermaine of Oxford Archaeology North has carried out a UAV survey at Greenside. Funds are available from Historic England to complete a survey of the whole area. Condition reports are to be produced of each detail. Removal from the At Risk Register is sought, but if this is achieved there is concern as to how long it could be maintained as conditions change. The entrance cover needs to be re-painted. In order to prevent silting up Warren Allison intends to rod the drainage pipes at three month intervals. The long term solution to this problem would be to re-open and reinstate the entrance portal.

Coniston Copper Mine

The Heritage Lottery Fund bid had been submitted by the May deadline. The result is expected at the beginning of September. If successful then construction will commence in October or November with dry stone work at Penny Rigg mill and at Paddy End mine. Major works would start in April or May 2016.

Regular monthly water sampling is being carried out at several sites in the Coppermines valley. Samples are being taken from ten sites in and around Levers Water and Red Dell Becks; sonds, which measure water flow temperature, conductivity, etc, have been placed in Deep Level adit and below the concrete road bridge above the waterfall at Church Beck. In general it seems that water from the mine contains some zinc, whereas water from the tips contains copper.

Coniston History Society has been surveying the tips, etc in Red Dell .

Tilberthwaite mine

Work is continuing to clear the last fall. A conducted visit to the work face was carried out for the local farmer and others. Coniston History Society have carried out some surveys in Dry Cove. A site meeting for interested parties is to be arranged on July 16th to examine the building remains there and to try to determine their uses.

Threlkeld Mine

The Environment Agency has been working at Gatesgill, Threlkeld and the local authority is working at Woodends Adit to treat the water issuing from it. Archeo monitoring is being carried out. Yellow Dam has been sealed and the water flow has been controlled. The present work is to stabilise the system at the top end. Once this has been done water treatment will be addressed later.

Honister Quarry

It is planned to relinquish planning consent for tip crushing at Dubs Quarry in return for consent to hand pick stone from the tips. They are considering the use of High Fleetwith Quarry for storage of surplus stone or waste. Very good rock is being found within Honister Mine. The future for the quarry is bright!

More ecological visits are to be organised for next year. Fix the Fells have dropped bags of stone for use for repairs which are causing concern as erosion is being caused by people walking around them!

AOB

Alastair Cameron has taken three ex quarrymen to visit Brossen Stone Quarry on Coniston Old man, There are eight or nine sites on the Old Man that should be recorded, perhaps by UAV flights.

The NAMHO Conference was held recently. CATMHS led delegates into Hudgilburn Mine

The LDNPA Annual Archaeology Conference will take place on 11th October at the Theatre by the Lake.

The next Mines Forum meeting will be on October 13th.

New Industrial Trail on C2C cycle route at Workington

The charities Sustrans and Art Gene are to start a new industrial heritage arts trail along two sections of a 19th century railroad, which once formed the lifeline of West Cumbria's iron industry. The former railways are part of the Sea to Sea (C2C) walking and cycling route between Whitehaven to Rowrah, and Workington to Seaton, Siddick and Broughton Moor, but overgrown platforms, a rusty iron ore crusher and a railway signal are historic reminders of the paths' industrious past. A number of railway lines in the area were linked to the iron ore mines at Knockmurton and Kelton and ironworks at Workington, Cleator and Distington.

Now thanks to funding from the Heritage Lottery Fund, Sustrans and Art Gene will begin to investigate the secret stories behind the area's industrial history and wildlife for a future arts trail along the paths. The project, called 'Tracks of the Ironmasters', is the local name for the main iron ore railway in the area.

The former railway is a key part of the C2C route, which now attracts 15,000 cyclists every year for the challenging 140 mile long distance ride between Whitehaven and Sunderland. HLF awarded an initial £49,700 for Sustrans to develop the 'Tracks of the Ironmasters' project and Sustrans will also bid for an additional £640,300 to implement it.

Ballachulish Quarry, Argyll.

The Heritage Lottery Fund, Highland Council and Historic Scotland are funding a £227,000 project at Ballachulish. The project will consolidate a stone arch under the Tom Beag inclined plane, as well as researching the history of the quarry, improving access and on-site interpretation. The conservation work will start in July and is due for completion by December.

Book Review: Barrow Salt, by Brian Cubbon

A couple of years ago I read Landless' British Mining account of Preesall salt mines, and consequently spent a happy afternoon splashing through Lancashire floods finding abandoned pipes and valves. So, when at the NAMHO Conference, Mike Moore's book stall had a copy of "Barrow Salt" by Brian Cubbon, I did not hesitate to buy it.

This book is that perfect combination of well researched history, which keeps one reading, combined with maps and photographs to make one want to visit and see the sites.

The author bases his account around the diaries of Edward Wadham, who was the Duke of Buccleugh's Furness Mineral Agent from 1851 to 1912; but has added his own extensive researches in the Barrow Records Office and elsewhere. References are carefully listed, so those interested can find further details.

General historical and geological information is given before the author concentrates on the salt discovery at Walney in the late 1880s. There is careful analysis of the finances and management of the various salt companies formed. The companies' directors have been researched and the relationships between them make for interesting reading.

The book includes early twentieth century maps and several photographs of salt works, brine wells and transport. 1988 aerial photographs show 'ghosts' of features and suggest that remains may be difficult to detect on the ground now.

This book is heartily recommended. It is easy to read, but full of carefully researched detail on people and places. The finances and development of the Barrow Salt Company Ltd make the directors' hopes, disappointments, successes and disagreements come alive.

However, if, like me, you want to visit Walney Island to look for remains of the salt industry, then go in the middle of the day. I arrived at South Walney at 5.30pm to discover that the gate across the narrow road is padlocked at 5pm every day.

Book Review: The Parish of Satterthwaite, a Social History by Suzanne Tiplady and Kevin Baverstock.

I recently attended a most interesting talk at the Coniston History Society by Suzanne Tiplady, about Bobbin Mills. Because of the local resources, especially wood, Satterthwaite used to be a relatively wealthy industrial area with a much larger population than it has now. Wages in Westmorland were the highest in the country, and the south of England was impoverished due to lack of work. Some of the many bobbin mills developed on sites

previously occupied by iron forges, such as those at Penny Bridge and Force, which had ceased to operate.

This book, which has 592 pages and 450 illustrations, covers the social history. It has taken ten years to research and is the first volume of a two part series that sets out to be a complete study of the people and places of the parish of Satterthwaite. Volume 2 will record the surviving land features and remains of vernacular buildings in order to reveal the history of the landscape.

Volume 1 costs £35. To obtain a copy email info@saetpress.co.uk or phone 10229 860181

New Books

The Whitehaven Colliery Through Time by Alan Routledge,
Paperback, 96 pages, Amberley Publishing, 2015, £13.50-£15, **ISBN-13:** 978-1445640037

Railways of the North Pennines: The Rise and Fall of the Railways Serving the North Pennine Orefield, by Dr Tom Bell
Paperback, 288 pages, £20, The History Press, Stroud, ISBN 9780750960953

Welsh Slate, Archaeology and History of an Industry, by David Gwyn
HB, 288pp £45. Published by Royal Commission on the Ancient and Historical Monuments of Wales (www.rcahmw.gov.uk).

NAMHO 2015 Hudgill Burn Sunday 24th May.

When I agreed to lead this some 9 months earlier, the thought of my wife's birthday and our 40th Wedding Anniversary to be celebrated on this day had completely eluded me. However, the combination of roses by Interflora, delivered during the morning and an evening meal at an exclusive country pub saved me from a fate.....



Meet Leaders and six delegates in the recently drained entrance. Photo by Peter Johnson

During the morning of this trip, Tony Harrison delivered his lecture on Britain's longest maze cave, Hudgill Mine Caverns, Cumbria, UK. Some of those delegates visiting the mine/caverns also attended this very informative talk. We met up in the Nenthead car park at 12.00, the departure to the mine was delayed a little due to two of the delegates arriving late from a morning underground visit to Ayle Colliery. This was purely a logistics problem and not the fault of the previous trip running late or the fault of the delegates.

During our wait, we were entertained watching the impressive COMRU ambulance with a vast array of equipment on display. I would say they are pretty well equipped for any eventuality! We always hope we never need them!



Photo shoot in Peeping Star Passage. Photo by Peter Johnson

Because of limited time, only a short tour of the mine workings took place. This involved looking at the progress made by CATMHS over the years before we moved on for a look into the recently surveyed Caverns. We ascended the Thomas Shield's Rise and along the main passage taking time to sign the newly installed visitors book and look at all of the graffiti put there by the miners starting nearly two hundred years ago. We went through the Collapse Chamber and on into 'Peeping Star' passage, where we stopped for group photos before moving on to the Caucasus sector.

All of these areas have been named by the Moldywarps Speleological Group who carried out the surveying work. The same group has now had a scientific paper published on Britain's Longest Maze Cave. I think it is fair to say that all visitors on this day thoroughly enjoyed the trip and arrived back at our cars for 5.00 p.m. Pictured: Colin Woollard, Peter Johnson, Helen Nightingale, James Johnson, John Brown, Kelvin Mckivitt, Paul Rodrigues and David Taylor.

John Brown

Professor Alexander Klimchouk of the National Academy of Science of Ukraine visits Hudgillburn Mine Caverns.

Tony Harrison and John Dale of the Moldywarps Speleological Group had arranged to take Professor Klimchouk and British Geological Survey geologist Dr Andy Farrant into Hudgill Burn Mine Caverns on Saturday 27th June. The Professor, whose research interests are Speleology, Karst Hydrology, Karst Geomorphology and Speleogenesis, flew out from Kiev to take a look at this unique (to the UK) maze cave system which is thought to show hypogenic characteristics, and may be the only hypogenic cave system known to exist in the UK.



Professor Alexander Klimchouk signing the visitors book in Hudgill Burn Mine Caverns with Dr Andrew Farrant looking on.

Photo John Brown

A scientific paper has been written about this cave system and published in Cave and Karst Science Vol 42, No 1, (2015) 20-41, entitled 'Britain's Longest Maze Cave' Hudgill Burn Mine Caverns, Cumbria. The authors are; Tony Harrison, John Dale, Pete Roe and Pete Ryder.

Tony Harrison gave a conducted tour of part of the maze cave which the Moldywarps Speleological Group had surveyed during 2013 and 2014. A

staggering 67 surveying visits within a 17 month period! This tour started with viewing and photographing the miners' graffiti, a brief look at the 'Peeping Star Passage' and then exploring the western extremities before turning back through what is known as 'The Iron Curtain', then heading south east to the main passage. Quite challenging ground in places! With a little more time to spare the group ventured into the Kamchatka Sector (all the areas were named by the surveyors) to look at an area which the miners broke into, but never ventured into the cave system from it. The ground has now all run in.

Professor Klimchouk in part of the Kamchatka Sector Here five passages converge.

Photo John Dale

After many years of working to open up the mine, which eventually gave access to the Caverns in 1998 and nearly 200 years after the miners first 'holed through' at Thomas Shield's Rise in 1816, CATMHS should feel proud to have been part of such a major discovery. A discovery which is tinged with slight embarrassment at the fact that none of us ever thought to explore the true extent of the system, but for the excuse that we were preoccupied with pushing the mine workings. However, our friends The Moldywarps Speleological Group have done a fantastic job, surveying it in great detail and producing such a fascinating scientific paper, and should be congratulated.



John Brown

NAMHO 2015 - A Brief Personal View

Friday 22nd May

Tynebottom Mine, Leader Mike Poulter

A splendid afternoon's start to the proceedings, not too strenuous (and believe it or not no water over the top of the Wellingtons) but lots to see; greatly helped by having a proper geologist among the group and a Meet Leader with an encyclopaedic knowledge. As a bonus the trip reached the gold standard of underground exploration going in through one entrance and coming out another.

Saturday 23rd May

Smallcleugh to Rampgill with exploration opportunities, Leader Robert Hall

An excellent day in every respect, a small delay in the start was taken as an opportunity by the ML who sent us off through the tailgate race into the smelter waterwheel pit at the mill site; everyone thought this was time well spent. Then we went on into Smallcleugh Level to view the Whimsey chamber before abseiling down two pitches into Proud's Flats. The landing



point for the second pitch was interesting but despite the ML's forebodings the descents were without problems. Here we started to encounter significant numbers of artefacts; adjustable arch formers, wagons, hand tools and a jack roll. Among the more unusual objects was a dynamite warmer complete with explosives. Having given a guided tour of the flats the ML settled down to lunch



while the rest of the party undertook a more detailed study of the area.

Lunch and exploration over the party abseiled down to the Rampgill Level-Hangingshaw Branch, emerging from an ore hopper to set off inbye along the level into ground that has not been long de-watered. The term is relative since water did briefly reach the waist and was mid-thigh depth for almost the whole distance to the Hydraulic Shaft in addition to being very ochreous. As would be expected the return to the Rampgill portal was undertaken at speed and it was good to emerge to bright sunlight.



Sunday 24th May

Ayle Colliery, Leader Dave Carlisle (Morning)

A mine exploiting a virtually horizontal, 15-18 inch thick, seam of semi-anthracite, Ayle has the good luck to drain freely through an adjoining abandoned lead mine and owners who are in the fortunate fi-

nancial position of being able to cease operations when coal prices fall and re-open when they rise. The relatively high value product obviously helps in this respect.

The method of working is longwall; a 40 metre face, with roadways at either end sunk below the base of the seam to allow tub access. An Anderson Boyes 12 inch high saw, with a 48 inch jib, is used to undercut the coal, hauling itself along the face with wire ropes anchored in the roadway. The machine is powered by a 50hp electric motor. Readers should imagine lying on their side in a 15 inch seam; immediately beside the saw as it advances along the face; whilst being constantly covered in the dust and cuttings from the chain; with only a caplamp for illumination; all the time being instantly ready to switch off. Once undercut a conveyor belt is set up just behind the face leaving enough space for the miner to break the coal down from the roof rock using a “windy pick” and then shovel the loose coal onto the belt for transport to tubs in the face end roadways (Again all done lying on your side in the height of the seam). Additional tasks required of the miners are the building of pack walls along the sides of the roadways as the face advances and the installation of timber props at regular intervals in the void behind the face.

Interestingly one of the problems encountered by the owners is that explosives are no longer manufactured in the UK, these being required for “dinting” (excavating below the bottom of the seam) the roadways at the face ends. Import from Eastern Europe is becoming difficult in small quantities meaning that whole coaster shipments may in future be necessary which are far too large to be accommodated in the colliery’s magazine. Added piquancy was due to the fact that almost the only writing that had been decipherable on the cartridges found in Proud’s Flats the previous day were the words “Made in Germany”.

Raw product is trammed out to a dressing plant involving screening and jigging to produce “beans” and “peas” for use in power feed boilers.

Absolutely classic meet with tremendous interest, the adit emerges into an old limestone quarry so is completely out of public view and has one of the most extensive ranges of historical artefacts and/or scrap iron that anyone has ever seen.

Sunday 24th May

Brewery Shaft, Organiser/Manger Paul Thorne (Afternoon)



Top to bottom it was obvious this was going to be a spectacular experience, who would ever have bothered to do Brewery Shaft by SRT or even in the early days by electron ladders if they had known this transport of delight was available?

With the shaft lighting on the ride up and down was magical at 2 feet per second plenty of time to look at all the features in the shaft that you’d missed when fighting with the rebelayes on the way down and just wondering if you were going to survive on the way up! On my



previous climb out I managed to pass the four rebelay's without ever clipping my cowstails in and that wasn't because I'm an SRT ace!



Once down there's the waterwheel, the small Pelton wheel and fly ball governor and the large Pelton wheel. At this stage it's as well to admit that while standing knee deep in water to photograph the small wheel I managed to drop both



To see so much equipment in situ is truly remarkable and made for a great afternoon. Paul remarked that once the shaft had been taken over they hoped to install a permanent shaft head installation so winch trips will be much easier to organise. Worth noting that at a previous Namho Paul was left marooned at the bottom of the shaft when the Norpex winch's hydraulics failed and he only climbed out when enough rope was assembled to allow him to reach Rampgill level.



Monday 25th May

Middlecleugh to Rampgill via Frog Shaft and Barron's Sump, Robert Hall

The ML managed to better the quality of Saturday's Smallcleugh Rampgill trip- no mean feat! Good to go back to Middlecleugh Level and admire the quality of CATMHS's work on the entrance arching before setting off deep into the mine to descend another CATMHS exploration, Frog Shaft down to Smallcleugh horizon and into the magnificence of Barron's Sump. Then onwards into what can only be described as an absolute maze in three dimensions (nothing like wriggling backwards through a narrow aperture knowing that there is a 15 foot drop on the other side and if your feet don't find the ledges!). Pressing on via G Hetherington's cross cut, Wheel flats and finally Gully Back cross cut (cleared by CATMHS) it's back via Proud's Sump and Flats down to Rampgill Hangingshaw, only this time we left out Hydraulic shaft and went straight outbye.

No mention of the social activities since I didn't attend any nor the lectures but no one had any complaints about them. The NMCS organisation was outstanding; they are to be congratulated on their performance. If you haven't attended Namho then I can only urge you to do so there really is something for everyone.

My personal thanks to Mike Poulter, Dave Carlisle, Robert Hall and Paul Thorne (and team); all of whom were top class.

John R Aird

Danby Lead Mine - 18th April 2015

Chris Cowdery (ML), John Aird, Steve Brown, Roger Ramsden, Pete Brookdale.

Danby Lead Mine is rather splendidly situated towards the upper part of Arkengarthdale, on the Western fellsides. It is probably the northernmost productive mine in the Swaledale orefield, as efforts to the north in Punchard Gill met with little success. It worked a number of veins, which were continuations of the veins found in the Moulds Side mines for the most part.

Tyson (British Mining No. 53, page 57) mentions a rich strike of ore in 1806. By 1816, most of the veins were worked out above the level, so an underground shaft was sunk for 11 fathoms (22yards). A circular chamber for a horse whim was also installed adjacent to the shaft. Mark Simpson wrote a report in Newsletter 37, and provided the best survey found by the ML in his researches for this meet. Mike Gill (Swaledale, its Mines and Smelt Mills page 109pp) states that the ore was worked out by 1816, so an 11fathom underground shaft was sunk. In a Government Commission report of 1863, it is noted that 60/70men were working underground, 9fm above the level, accessed by stemples in wet rise. Yet Geology of the Northern Pennine Orefield, Vol 2, page 139, suggests the Danby Level was driven 1830-1841.

The purpose of this meet was to descend the underground shaft, as no record could be found of what lay at the bottom.

The group ascended the track from the Reeth-Tan Hill road, and entered the mine adit. The horse whim chamber was soon located, and a rigging effort was undertaken from the short level between the horse whim chamber and the shaft. The rock in this area is variable, as the level and chamber is located on a lime / shale margin, and hence has a ceiling which would much rather be the floor.

Capt. Aird rigged a fine descent, which the ML duly descended. The material at the bottom of the shaft had spent some of its existence closer to the top of the shaft. However, a small fissure was noted which looked like it might be possible to squeeze through. The level could be seen leading away. New member Pete Brookdale descended next, he being an active caver. He inserted himself into the fissure but proclaimed it too tight. The ML also tried and concurred. Pete also noticed some writing on the wall stating 'Choked after 20M east - MW 96'. The ML followed by Pete returned to the top of the shaft.

The group then de-rigged, lunched, and proceeded to follow the badly collapsed level behind the shaft. This level terminated at a rise up into stopes. A piece of polypropylene rope hung from somewhere up the stope. It was decided to attempt to bolt up this rise, so the ML started off.

Meanwhile John, Roger and Pete went



exploring, finding a number of other rises,

Natural cave in Danby

and Pete spending quite some time in the natural caves at the end of the main drive. The ML managed to get 7 bolts in before Steve got some grit in his eye. He decided to rinse it out, so went in search of his bag. Unfortunately the others had moved it closer to the entrance to speed the exit later on. Steve failed to find the bag, so proceeded to panic. The ML managed to lie about his imminent descent, and put in two more bolts before rigging an old rope and descending back to an anxious Steve.

The rest of the group returned at that point, and everybody returned to day.

A return visit is required to bolt the remainder of the rise, which is probably a little over 10m to go; however it may be possible to get into a stope and climb more easily. A return visit is also required to explore the natural caves.

Roger and Pete returned to their respective homes, whilst the others (and Mrs. Aird) enjoyed a fine meal at the CB Inn.

Raygill Lead Mine - 19th April 2015

Chris Cowdery (ML), John Aird, Steve Brown.



Raygill is situated just to the East of Hawes, passing underneath the A684 road. History of this mine is sketchy; Spensley (Mines and Miners of Wensleydale, p210) gives a summary. The mine was working in the mid 19th century, and was reopened by the EMRG in 1979/1980. Conveniently, Spensley gives a survey.

The group had heard remarks about access, so the ML went to the closest farm to the mine to seek access. Nobody was in. The group then started to prepare for the trip, and whilst doing so a tractor drove past as they were getting changed. The ML enquired of the farmer if access would be possible. He indicated that it probably would be, even though it wasn't his field. The group worked on the basis that they had made a good effort to get permission and would proceed.

The mine enjoys excellent structural integrity, with no roof failures at all to hinder the days exploration. The

mine has the main haulage level, with all the workings as flat workings a few feet above,

connected by a number of rises. The current entrance drops down a very poor wooden ladder (probably dating from the 1979/1980 exploration) into part of the flat workings.



The group explored the Northeast Flats, marvelling at the minerals that the mineral collectors had left behind. There are some fine examples of galena. Next they dropped into the main level, fully exploring that. There is a rather splendid calcified ore hopper and ladder on this level. A rise was located with blue polypropylene rope, so the ML ascended that. Steve also ascended with some procrastination, and Capt. Aird was dragged up by his armpits.



This part of the mine (the Southeast Flats) is massively complex, on multiple levels. The ML explored a section by himself, but aborted when he realised he might not actually be able to return!

Various artefacts were found, including zinc piping and a wooden wheelbarrow wheel. The group then enjoyed lunch, and returned to day.

Chris Cowdery, <http://www.cowdery.org.uk/>



Plumpton and Newland Furnace, 10 June

Present: P Sandbach (ML) and dog, A Bryson and 2 dogs, P Timewell, D Robson, I Matheson on bike, R Benbow, A Postlethwaite, Mr & Mrs Jarvis.

The Jarvises had not planned to go for an evening walk around Plumpton or to view slides of CATMHS activities or to share the back of a Landrover with a dog and bike. They came to research their family tree, one branch of which is the Lathams, who owned Duddon Furnace. They were visiting furnaces and the easiest way to fit Newland into their plans was to bring them along on Wednesday. It proved overambitious to fit in Plumpton mines with a tour of Newland and a slideshow.

Plumpton mines are old, with references to mining in the 13th century. The Backbarrow journals record 8 tons of ore stocked at Plumpton which remained unused for several years about 1800. Joseph Rawlinson had the lease in 1872 when it was sold with his other mines to the Furness Iron & Steel Co. The last record of ore being raised was 6288 tons in 1874. The North Lonsdale Iron & Steel Co took the royalty in 1896 and found little if any ore but they exploited the limestone quarries to the full. The quarries were used again in the 1960s when they became the council tip. We stopped briefly at the two magazines (one built in 1915 by the NLI Co to replace the other) and at the openworks where the chasm was mostly hidden by the trees. Then it was on to the furnace where our guests were given a lightning tour and a slideshow.



Plumpton Magazine. Photo P Sandbach

The slides were mostly John Helme's and included some early slides of work at Newland and some of the opening of Logan Beck mine. There were also some of Mike Davis Shiel's slides showing the furnace looking like an unkempt shrubbery.

I would like to thank Dave Robson for the technology to show slides and also for return transport to Canal Foot, Joan Helme for permission to copy John's slides, CIHS for copies of Mike's slides and permission to use them and Mr and Mrs Jarvis for a generous donation. I must apologise to anyone who was expecting the full tour of Plumpton or Newland but will take full credit for arranging the meet on the first warm evening of the year.

Peter Sandbach

THRANG CRAG QUARRY 14th June 2015

John Aird (ML) Roger Ramsden

To quote Jon Knowles “Some meets are popular and others are less so”; however in this case the combined ages of the participants more than made up for the lack of attendees. A reconnaissance of the site had been carried out earlier in the year by Chris Cowdery and the Meet Leader with unsatisfactory results, since apart from finding the shaft had been securely grilled (presumably by the NT) no other underground access was found. The available information suggested that apart from the direct descent of the shaft there should be access to an adit that entered the shaft part way down and also a low adit that emerged in the garden of a house below the quarry.

The public footpath that runs through the quarry routes right past the shaft (whilst it may appear that



access could be gained by moving rocks from under the near left hand corner of the shaft cover this would not have been a good idea, as will become clear) and was followed across the floor of the open area up to the north eastern corner where an adit leads to a substantial closehead. Apart from a large number of used tea lights nothing of interest was found. On exiting, the footpath was followed into the village of Chapel Style and then along the access to Baysbrown allowing inspection of the gardens of the two properties south of the Langdale road for signs of a low adit but nothing was found.

The vehicles were then driven up the steep ramp behind Thrang Brow housing into the car park, at the edge of which lie the remains of an “Ingersol Rand” (no name plates could be found) air compressor. At the CATMHS 1993 evening meet a local resident, Mr John Sanderson reported that this was the first of its type imported.

Across the carpark a short scramble up the overgrown tips towards the shaft located the elusive access adit. The reconnaissance team had come within about 6 feet of the entrance without finding it. This was not surprising since the adit was barely 2 feet wide at the base and consisted of the hanging rock wall on the left and a built up pack-wall of deads on the right to produce an isosceles triangle vertical section. This terminated at a crossing of the



stone arching of a level below. It was clear that this was a deliberately created route since the stone arching had been neatly squared off and was not collapsed. Inserting a bolt in the hanging wall allowed an electron ladder to be rigged and descended into the level. In the opposite direction away from the ladder the stone arching gave way to solid rock for 20-30 yards before entering a large blind closehead with ample evidence of sleepers in the floor. Returning to the ladder and following the arching round the right angle bend led directly to the shaft. All of the arching is to a very high standard and extends all the way to the shaft; the

horizontal rails support the shaft wall above accounting for the slight bowing. The adit is not centred on the shaft but is offset significantly to the



right hand or south side of the shaft centre line. The platform which can be seen to the right of the shaft consists of two timbers covered with slates and was presumably used for loading. A “deadman” in the shape of a large slab in the side wall was bolted to provide protection for the installation of the anchors allowing descent of the shaft; as this was done it became clear why descending from below the top grill would have been injudicious, some sections of the walling have detached and any descent from above would require absolute certainty that none of the walls would be touched. Photos below show the view down from the adit and up from the base.



The timber supporting the loading bay can be seen as well as the two rails above supporting the shaft wall. The extent of the shaft walling is very considerable; the shaft measures 9 feet by 9 feet and has a depth from grill to the rubble base of 102 feet, the adit being some 48 feet below the grill with the walls extending below the adit. The timber beam to the left of the rope bag on the shaft floor indicates the way on downwards. After clearing some of the loose debris it was clear that hole was not a collapse but a carefully constructed access point. In-



serting a couple of bolts in the rock wall meant the beam acted as a deviation to hold the rope off the rock edge and allowed descent to the level of the pool. The additional descent amounted to about 18-20 feet and once down it became apparent that the shaft did extend all the way down giving a total depth of 120 feet, clearly the intermediate stage of the descent was caused by a build-up of rubble which had fallen down the shaft. From the wooden remains in the shaft and below in the closehead it appears that the hole that was descended may have allowed haulage of slate and waste out of the sump in which the pool has formed which is of considerable depth. Material up hauled would presumably have been loaded onto trucks and trammed through the arch for transport via the shaft. It is clear that the water level varies very little over time and given the size of the shaft and the fact it is completely open to the sky there must be a drainage channel at or close to the water level. In the Meet report in 1993 an adit running from the base of the shaft is said to be collapsed after 20 yards, as can be seen in the photo below it is now impossible to access even this short length. An archway to the left of the pool leads through to a further closehead off which a blind development level has been driven. A few rusty detonator boxes remain in the closehead.



It was noted that in none of the closeheads (three in all) were there any signs of anchorages in the roofs for lifting slate clogs presumably as at Caudale working was by drilling and charging from ladders, the clogs then being dressed on the floor so that only slates and small sized waste was transported out. Having completed examining this lowest floor from which there is certainly no exit now, a return was made to surface. While climbing the shaft it was possible to have a close look at the walling, which is often described as being supported on “rotten timbers”. This is incorrect all the walling rests on iron spikes driven into the rock apart from the section over the adit which rest on rails. The timbers that are referred to in descriptions are bat-tens that run round all four sides of the shaft at regular intervals of approximately 4 feet vertically, these are not of sufficient cross section to provide support for the walls and must have been the mountings for the vertical guides in the shaft. Having derigged and returned to the surface all that remained to do was

sum up the observed facts and pose the unanswered questions that arise from them.

The well-known print dated c1833 shows (even allowing for artistic license) what was already a very substantial underground quarry and the last recorded working was in 1936, with 2 surface and 2 underground workers. Observing the above ground remains it is clear that the main bulk of the site was formed by un-topping the original closeheads and then working opencast, yet this very large (certainly by Lake District standards) lined shaft was constructed to depth of 120 feet, despite the fact that for a fraction of the cost a level could have been driven from the base of the shaft out to the valley. In addition there is no easily available source of water to provide power for shaft winding and absolutely no sign of a wheel pit. The suggestion that steam power was used for winding is technically sound but the economics would require the quarry to be returning an exceptional rate of return in order to be viable. Hopefully more research will help; maybe the Lowther archives hold the keys.



“There are no Old Bold Explorers”

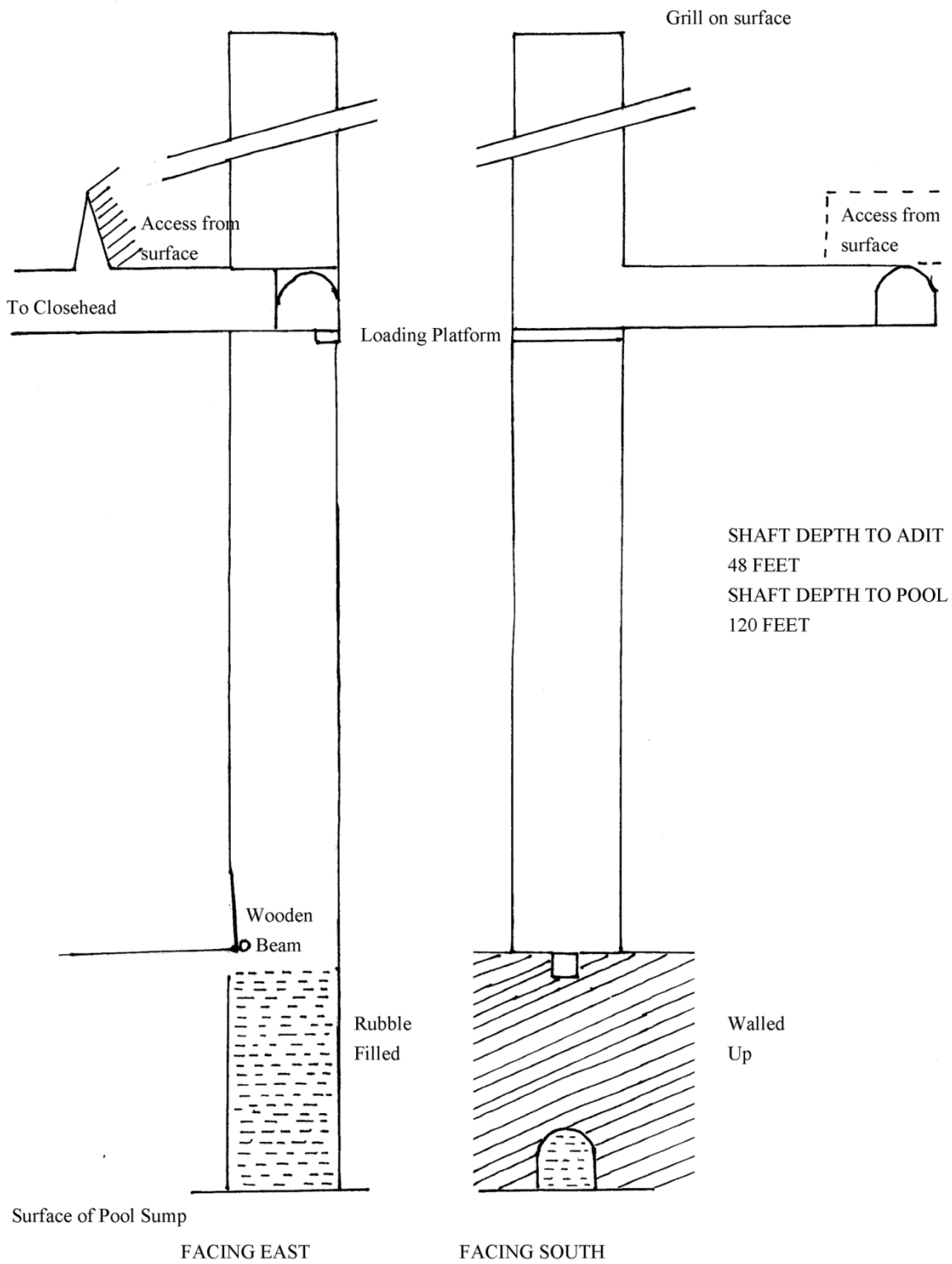
Amplly demonstrated when the “deadman” which must have weighed at least 5cwt started to slide gracefully out of the wall when loaded! Fortunately the alert half of the meet sprang forward and chocked it in position.

Thank you Roger. You’re a gentleman.

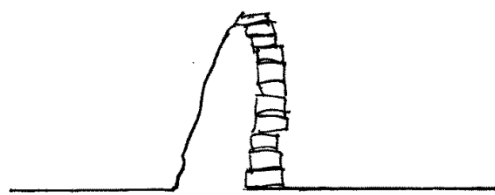
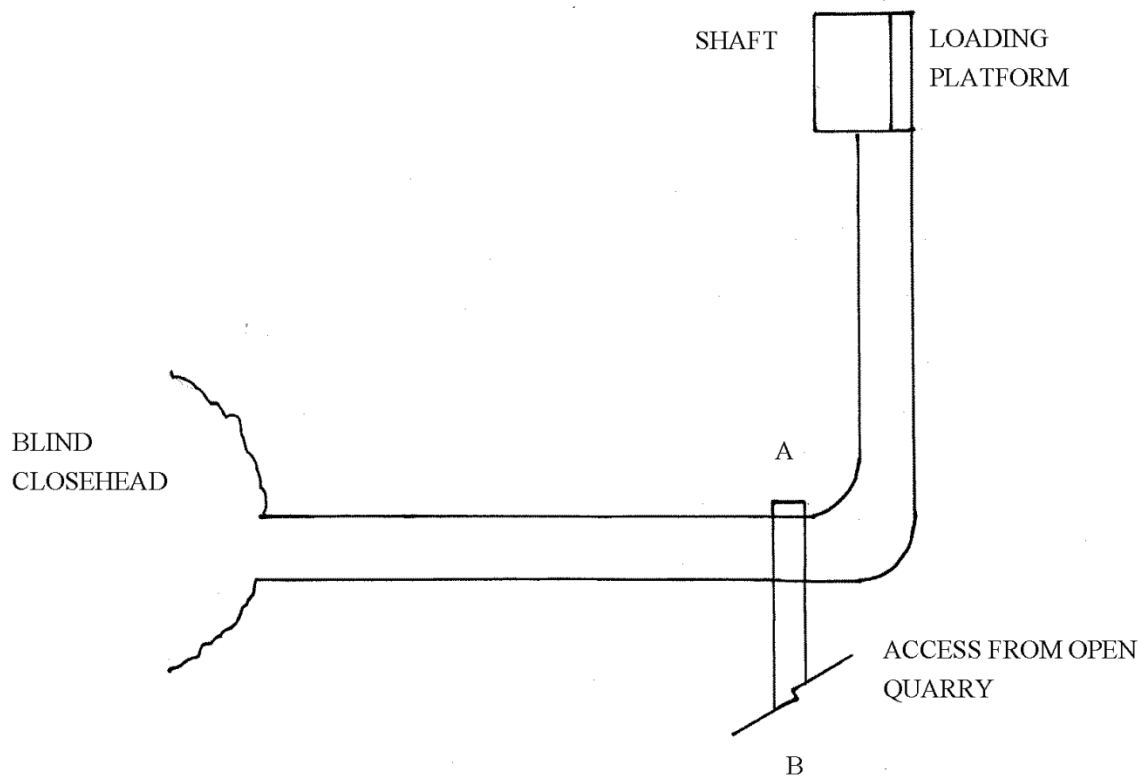
Reference CATMHS Newsletter 36 October 1993 “Thrang Quarry” ML Peter Fleming

P.S. Should anyone decide to repeat this exercise it would be as well to have someone remain at the shaft head, although the top grill is of small mesh the immediate proximity of the right of way could easily lead to stones being dropped through it.

THRANG CRAG QUARRY SHAFT SECTIONS



PLAN OF ADIT CLOSEHEAD AND SHAFT



SECTION A-B AT TWICE PLAN SCALE

Tilberthwaite Copper Mine

A visit to Tilberthwaite Copper mine took place on 13th July to try to improve interpretation of the surface remains. Those involved were Eleanor Kingston (LDNPA Archaeologist) Alastair Cameron, Mike Mitchell, Mark Simpson, Warren Allison and Ian Matheson.

The mine is situated in Low Dry Cove, just above the waterfall at the head of Tilberthwaite Gill. It is a remote and compact site that appears to have been undisturbed since surface operations ceased around the 1860's. It is adjacent to the North Vein which runs across the fells in a WSW/ENE direction and contains many open workings, some of Elizabethan origin. On the site are two buildings, a collapsed shaft, a waterleat and stilling pond and quantities of mine waste. At some time Muckle Beck appears to have been diverted away from the site. The stone lined channel is now dry but is shown clearly on the 1850 OS map

Tilberthwaite was worked in Elizabethan times and is mentioned in a report of 1602. The final lease was surrendered by the Trustees of Thomas Wynne in 1894 and the crushing mill wheel was dismantled by Jack Helen in 1897, so the life of the mine was almost 300 years. During most of this time all materials would have had to be hoisted up to the surface. It is likely that there were many modifications and changes to the buildings and infrastructure during all this time.



A collection of documents of mainly 18th century origin relating to Tilberthwaite are in the archive at CRO Whitehaven. These have been photographed by CATMHS but not yet transcribed and include several leases and licences, but not much to indicate actual mining taking place. Charles Roe of Macclesfield seems to have had an interest in 1799. In 1823 Michael Knott had the mines, and said he 'should like to turn the management of his mines over to (John Taylor)'. As Taylor's agent John Barratt was driving an adit, thought to be waterfall Level in 1824. In 1847 Barratt started to drive Penny Rigg Horse level and to sink a shaft to meet it, which wasn't completed until about 1860. We have taken notes which record stopping in the 35 fathom level and the Adit level in 1867 and copies of a mine plan in the possession of Rydal Estates that seems to date from the same period.

There are currently three projects being carried out: The Penny Rigg Horse Level dig, which is nearing completion after several years of work, Mike Mitchell and Mark Simpson are making 3D digital models of the structures at the mine, and Alastair Cameron is carrying out a GPS survey of the area. All this information, together with an account of the Horse Level dig, will be used for the proposed book 'The Story of the Tilberthwaite Mine'. IM.

Greenside Mine electric locomotive

Over the years there have been several articles in the newsletters about the Greenside Mine electric locomotive, the first in a UK metal mine, which I have read with great interest, and also the account in Sam Murphy's book 'Grey Gold' as my Great Grandfather Joseph Jenkinson (on my mother's side) drove the loco for most of its working life. My Great, Great Grandfather had first come to Patterdale from Coniston (where the family were copper miners and quarrymen) in the mid 1850's and the family then worked at Greenside until closure. An uncle was the last one to be paid off in January 1962 and my mother worked in the office at the age of 16, so she is now the youngest surviving person who worked at the mine.

Between 1999 and 2003 friends, some who are members of CATMHS, helped John Hodgkins (a friend from Normanton near Wakefield) and myself to put on an two week exhibition each year in the Glenridding Public Hall on the mine and life in the parish while it was working. John had worked for Bill Shaw at Force Crag Mine in the 1960's and helped him with the research for his book 'Mining in the Lake Counties' and was allowed to copy all of his photographs.

My Grandmother and her sister arranged for me to visit many of the local families in the parish who were only too happy to lend their photographs to be copied and be put into the exhibition. People had previously come into the parish asking for photographs of Greenside only to be told '*na there's nought*', but there was. We organised re-unions for people who lived in the parish at the time the mine was working to come back and see people they had last seen over 50 years ago and they also brought a wealth of information on the mine and the parish, much of it original and never seen before.

The photographs (some even in colour) of Greenside could be the finest on a single mine in the country and we have been able to name many of the people on them. What was also interesting was that many of the photographs previously published have been cropped and so were not the original.

However the following three photographs show the first electric locomotive from the start of its life to the end, and all are from the originals, although there are others.

According to Sam Murphy in his book 'Grey Gold', *'the first wagons of bouse were drawn from the mine by electricity on the 21st February 1893 and the driver was Thomas Allinson. He remained the driver until January 1898 when he was replaced by Joseph Jenkinson'*.

Sam also reports on the first electric winding engine in a UK metal mine that *'at Smiths shaft in December 1896 William Hugill and his five partners commenced filling wagons and Joseph Jenkinson and his three partners commenced driving horses and caging, so this effectively marks the date at which it finally came into service as a proper cage shaft'*.

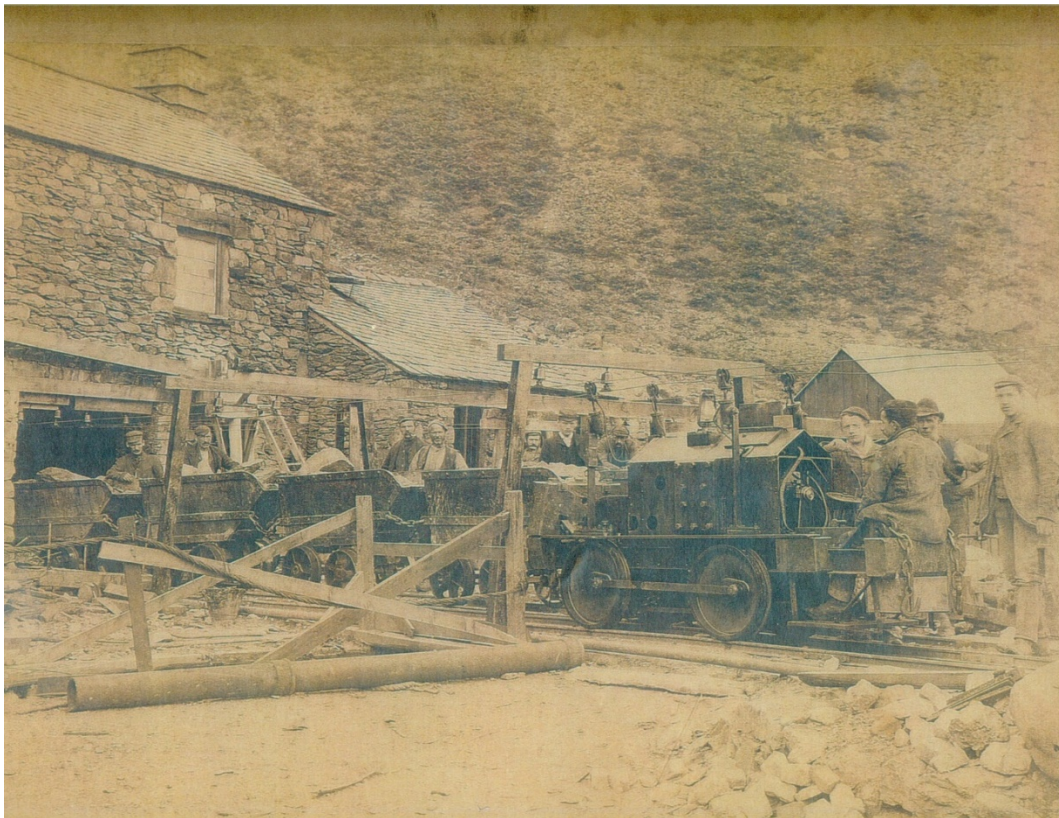
Joseph drove the locomotive until early 1935 when the mine was placed on a care and maintenance and I remember my grandmother saying that he did not go back on the loco when the mine re-opened as he suffered from rheumatism from driving it for so many years. He played a part in both of these unique events.

In his book Sam states that *'by 1938 the Lucy loco itself was getting on for fifty years old, and was a rough old machine with a tendency to shake loose the great iron rivets which held the*

frame together, but nevertheless it seemed virtually indestructible. However it was now of a very old design by the standards of this pre-war period, and its power was limited. With the development in the mine promising a very large output of ore, of which must be trammed out via the Lucy Level, it was decided to replace it with a new locomotive of more modern design which could haul more wagons faster. In 1938 just before the new mill was brought into service, a new BEV locomotive (made by British Electrical Vehicles Ltd) was obtained from Wingrove and Rogers of Liverpool.

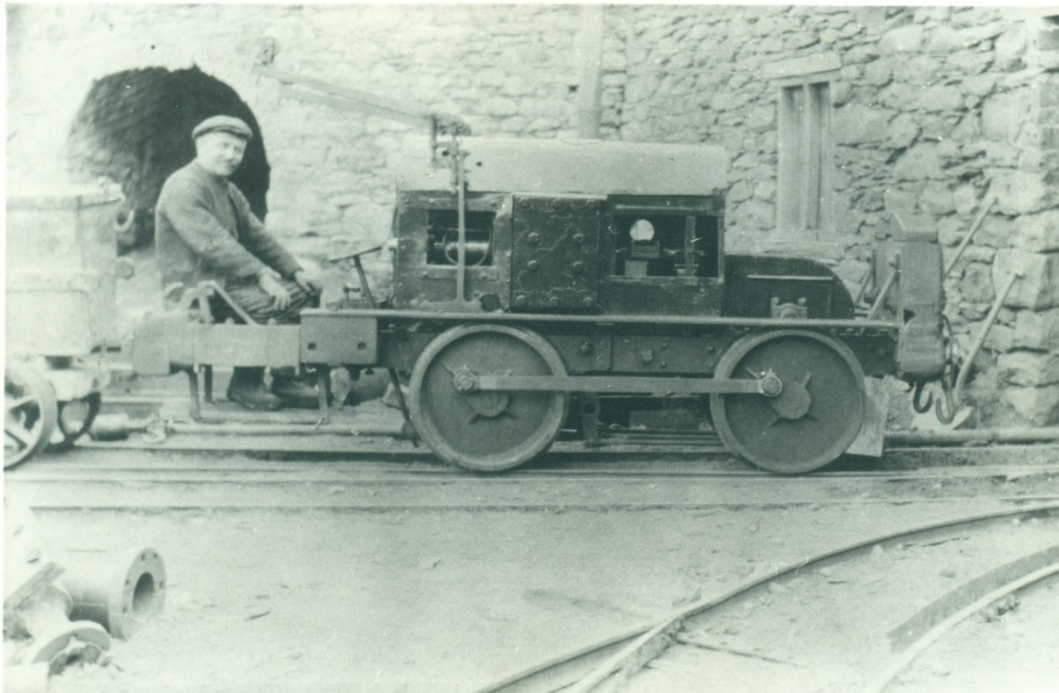
This effectively marked the end of the original electric locomotive.

The original locomotive driven by Thomas Allinson taken between February 1893 and January 1898, but presumably not long after it was commissioned. There is a photograph which pre-dates this showing horses being used on the level.



Joseph Jenkinson at the entrance to the Lucy level with the arched entrance to the incline which took the wagons to the crusher behind. Note the change to the top of the locomotive and the pick up arms to transfer the electricity from the overhead cables. According to my Grandmother this photograph was taken by a group of Americans who were visiting the mine in the early 1930's. Sam Murphy confirms that in 1921 the wagons in the photo had been changed from the end tipping type to square ones which were emptied by a self-acting tippler mechanism.

When the mine re-opened in 1936, Joseph's brother Clarence drove the locomotive.



This is probably the last photograph of the old locomotive which was taken just to the right hand side and below the new dressing plant circa 1938. The photograph came from Anne Birkett (nee Wilson) whose father Tom (second from the right) worked at the mine and it was taken as a post card. She has tried to identify who the other men are, but is not a hundred percent sure. The legs of part of the conveyor to the 110 ton ore bin can be seen at the top of the photograph.



The intention is to try and date all the photographs of Greenside and identify as many of the people in them using family and other photographs from the parish and hopefully one day publish them.

Warren Allison

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